

HIGH COMPLIANCE, HIGH STRENGTH CATHETER BALLOONS USEFUL FOR TREATMENT OF GASTROINTESTINAL LESIONS

Abstract of the Disclosure

Balloon especially useful for dilatation of gastrointestinal lesions have a burst pressure of at least 9 atmospheres, a diameter at 3 atmospheres of about 5 mm or more, and an average compliance over the range of from 3 atmospheres to burst of at least 3% per atmosphere. Such balloons and balloons having other combinations of burst strength, compliance and diameter may be prepared by a method wherein a tubing of a thermoplastic polymer material is radially expanded under a first elevated pressure at an elevated temperature to form the balloon at a first diameter and then annealing the balloon at a second elevated temperature and a second pressure less than the first elevated pressure for a time sufficient to shrink the formed balloon to a second diameter less than the first diameter. The thermoplastic polymer material may be a block copolymer material. Catheters bearing balloons prepared by this method have low withdrawal force requirements, especially catheters used in through-the-scope applications.